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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,324	12/14/2001	Tadao Kusuda	NAK1-BQ74	4960
21611	7590	02/08/2006	EXAMINER VO, TED T	
SNELL & WILMER LLP 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			ART UNIT 2191	PAPER NUMBER

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,324

Applicant(s)

KUSUDA ET AL

Examiner

Ted T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/16/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 09/16/2005, entered by the filing RCE on 11/14/05.

Claims 1-20 are pending in the application.

Response to Arguments

2. Applicant's arguments in the remarks filed on 09/16/2005 have been fully considered. Applicants amended " *uninstall means to start uninstalling after the measure elapsed time read a first predetermined time, of a duration to enable a reconnect of the disconnected slave device*", as a part of timing control means, but does not discuss the novelty of this limitation as required by MPEP 714.04.

The Reference teaches a PC (master device) controls a process for installing or uninstalling Device Drivers (See Context in col.1-2) using a timer. The term "device driver," used in computer and appeared in the reference is known as a program routine that links the operating system to a peripheral device. Written by programmers who understand the peripheral hardware's command language and characteristics, the driver contains the precise machine language necessary to perform the functions requested by the application.

The installation detects a delay time, T1, from the connection. After the lapse time T1, the voltage reaches the high threshold Voh. This threshold allows the PC to recognize the connection and thus enables installing device drivers of a scanner or a printer (See FIG. 5C, and col.8: 41-49). The uninstallation detects a delay time, T2 from disconnection. After the lapse time T2, the voltage reaches the low threshold Vol. This threshold allows the PC to recognize the disconnection and thus enable uninstalling process (See FIG. 5C, and col.15: 20-33). In the case of re-connection from the disconnection, this elapse time T2+T3 is a predetermined time that enables a reconnection of a device

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after the disconnection (See col. 15:13-19, FIG. 5C). It reads the new limitation as recited in the manner in Claims 1, 11, and 14.

All Applicants' arguments have been considered. However, Applicants' arguments fail to discuss in accordance to MPEP 714.04.

Claim Objections

3. Claim 1 recites “; and” in line 10, and recites again “; and” in line 17. The semicolon “;” of “; and” in line 17 should be changed appropriately because the recitation “the disconnected slave device...” in line 12 is still part of the “uninstall means”.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 9-12 and 14-15, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et al. (EP 0 905 608 A1) (hereinafter, “Maeda”).

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 1: The Maeda publication discloses:

- *an uninstall control apparatus connected with a master device and for controlling a process for uninstalling control software from the master device, the control software being used by the master device*

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for controlling one or more slave devices a system consisting of the master device and the one or more of slave devices ("control method of a composite apparatus", column 3, lines 12-24)

- timing means for, if one of the slave devices is disconnected from the system, measuring elapsed time since the detection of the disconnection of the disconnected slave device (column 8, lines 16-44; column 11, lines 1-9; and see Figure 5C)

- timing control means for controlling the timing for uninstalling control software for the disconnected slave device (column 8, lines 20-37; Maeda teaches elapsed time intervals; voltage change is another criteria that is used, i.e., Figure 5B shows a graph voltage vs. time. The controller is not part of the slave device, the controller is part of the PC 102.); and

- uninstall means for uninstalling the control software for the disconnected slave device under the control of the timing control means, wherein the timing control means controls the uninstall means to start uninstalling after the measured elapsed time reaches a first predetermined time, of a duration to enable a re-connect of the disconnected slave device if the disconnected slave device is not reconnected to the system before the measured elapsed time reaches the first predetermined time (FIG. 5C, and col.15:20-33. For controlling the uninstall means to start uninstalling after the measured elapsed time reaches a first predetermined time, Maeda provides the measurement of a predetermined time T2+T3 that enables a reconnection of a device such as a scanner or a printer. See col. 15:13-19, FIG. 5C); and

- the disconnected slave device does not comprise the uninstall control apparatus (Scanner/printer is only an attachment).

As per Claim 2: The Maeda publication discloses:

- wherein the disconnection/reconnection of the slave device from the system is detected by a bus reset signal generated following the disconnection/reconnection (column 8, lines 16 44).

As per Claim 3: The Maeda publication discloses:

- wherein the uninstall process executed by the uninstall means includes a plurality of stages, and the timing control means controls the uninstall means to execute each of the plurality of stages in response to

the elapsed time measured by the timing means (column 8, lines 16-44; the actual uninstallation occurs in interval T3, but the uninstallation process starts in interval T1).

As per Claim 9: The Maeda publication discloses:

- wherein the timing control means controls the uninstall means to execute each of the plurality of stages at a predetermined time set for the stage, wherein the uninstall control apparatus further comprises: updating means for updating the first predetermined time and at least one of the predetermined times set for the plurality stages in accordance with external designation (column 13, lines 6-11 and column 9, lines 6-10; updating head information).

As per Claim 10: The Maeda publication discloses:

- update information reception means for receiving update information on control software, wherein when the update information reception means receives update information on control software and disconnection of the slave device corresponding to the control software is detected for the first time after receiving the update information, the timing control means controls the uninstall means to execute the uninstall process without controlling the process based on the elapsed time (column 13, lines 6-11 and column 9, lines 6-10; updating head information).

As per Claim 11: This is a method version of the claimed apparatus discussed above (claims 1 and 2), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Maeda.

As per Claim 12: This is a method version of the claimed apparatus discussed above, claim 3, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Maeda.

As per Claim 14: This is a computer-readable recording medium version of the claimed apparatus discussed above (claims 1 and 2), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Maeda.

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As per Claim 15: This is a computer-readable recording medium version of the claimed apparatus discussed above, claim 3, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also anticipated by Maeda.

As per Claim 19: The Maeda publication discloses:

- wherein none of the one or more slave devices comprises the uninstall control apparatus (column 11, lines 48-58 to column 12, lines 1-20).

As per Claim 20: The Maeda publication discloses:

- wherein the master device comprises the uninstall control apparatus (column 11, lines 48-58 to column 12, lines 1-20).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 6-8, 13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda in view of Davis (U.S. 5,862,393).

Given the broadest reasonable interpretation of followed claims in light of the specification:

As per Claim 4:

The rejection of claim 3 is incorporated, and further, Maeda does not explicitly teach restoration means for restoring data modified in the uninstall process, wherein the timing control

means, when the reconnection of the slave device is detected before the uninstall means completes the uninstall process, stops the uninstall process by the uninstall means and gives the restoration means an instruction to restore the data modified by the time when the reconnection is detected to a state before starting of the uninstall process. Davis teaches restoration means for restoring data modified in the uninstall process, wherein the timing control means, when the reconnection of the slave device is detected before the uninstall means completes the uninstall process, stops the uninstall process by the uninstall means and gives the restoration means an instruction to restore the data modified by the time when the reconnection is detected to a state before starting of the uninstall process (column 3, lines 38-49 and column 9, lines 5-17).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the apparatus disclosed by Maeda to include restoration means for restoring data modified in the uninstall process, wherein the timing control means, when the reconnection of the slave device is detected before the uninstall means completes the uninstall process, stops the uninstall process by the uninstall means and gives the restoration means an instruction to restore the data modified by the time when the reconnection is detected to a state before starting of the uninstall process using the teaching of Davis. The modification would be obvious because one of ordinary skill in the art would be motivated to retain device configuration information (Davis, column 2, lines 21-32).

As per Claim 6: The rejection of claim 4 is incorporated, and Maeda further teaches wherein the uninstall process executed by the uninstall means includes a stage for deleting registration information on

the control software being the target for the uninstall process, the registration information being generated at the time when the control software was installed, and the timing control means controls the uninstall means to delete the registration information when the elapsed time reaches a third predetermined time (column 11, lines 1-16 and column 9, line 29 to column 10, line 36).

As per Claim 7:

The rejection of claim 4 is incorporated, and Maeda further teaches storage means for storing installed control software, wherein the uninstall process executed by the uninstall means includes a stage for deleting the control software being the target for the uninstall process from the storage means, and the

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timing control means controls the uninstall means to delete the control software from the storage means when the elapsed time reaches a fourth predetermined time (column 11, lines 1-16 and see Figure 9).

As per Claim 8:

The rejection of claim 7 is incorporated, and Maeda further teaches acquisition means for acquiring control software and storing the control software in both auxiliary storage means and the storage means, wherein the uninstall process executed by the uninstall means includes a stage for deleting the control software from the auxiliary storage means, and the timing control means controls the uninstall means to delete the control software from the auxiliary storage means when the elapsed time reaches a fifth predetermined time (column 11, lines 1-38; and column 16, lines 18-27).

As per Claim 13:

This is a method version of the claimed apparatus discussed above, claim 4, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

As per Claim 16:

This is a computer-readable recording medium version of the claimed apparatus discussed above, claim 4, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

As per Claim 18:

The rejection of claim 6 is incorporated, and Maeda further teaches storage means for storing installed control software, wherein the uninstall process executed by the uninstall means includes a stage for deleting the control software being the target for the uninstall process from the storage means, and the timing control means controls the uninstall means to delete the control software from the storage means when the elapsed time reaches a fourth predetermined time (column 11, lines 1-16 and see Figure 9).

8. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda in view of Davis (U.S. 5,862,393), and further in view of Danforth (U.S. 5,493,680).

As per Claim 5:

The rejection of claim 4 is incorporated, and further, the combination of Maeda and Davis does not explicitly teach wherein the control software to be uninstalled is described in an object-oriented language, the uninstall process executed by the uninstall means includes a stage for unloading classes which was loaded at the time when the control software was installed, and the timing control means controls the uninstall means to unload the classes when the elapsed time reaches a second predetermined time. Danforth teaches wherein the control software to be uninstalled is described in an object-oriented language, the uninstall process executed by the uninstall means includes a stage for unloading classes which was loaded at the time when the control software was installed, and the timing control means controls the uninstall means to unload the classes when the elapsed time reaches a second predetermined time (column 22, lines 19-24; teaches unloading the classes).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the apparatus disclosed by the combination of Maeda and Davis to include wherein the control software to be uninstalled is described in an object-oriented language, the uninstall process executed by the uninstall means includes a stage for unloading classes which was loaded at the time when the control software was installed, and the timing control means controls the uninstall means to unload the classes when the elapsed time reaches a second predetermined time using the teaching of Danforth. The modification would be obvious because one of ordinary skill in the art would be motivated to maintain and reuse driver code.

As per Claim 17:

The rejection of claim 5 is incorporated, and Maeda further teaches storage means for storing installed control software, wherein the uninstall process executed by the uninstall means includes a stage for deleting the control software being the target for the uninstall process from the storage means, and the

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timing control means controls the uninstall means to delete the control software from the storage means when the elapsed time reaches a fourth predetermined time (column 11, lines 1-16 and see Figure 9).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ted T. Vo
Primary Examiner
Art Unit 2191
February 03, 2006